

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 - 14 (Canceled).

1 Claim 15 (Previously presented) A non-linear magnetic harmonic motion converter
2 apparatus comprising:

3 a plurality of gimbal supported ring magnets disposed in spaced apart concentric
4 orientation within a frame member, each gimbal supported ring magnet are disposed
5 within said frame member to reciprocate about an axial shaft disposed through a
6 central portion of said frame member, each gimbal supported ring magnet having a
7 gimbal magnet field of sufficient strength to extend to said axial shaft;

8 a plurality of electromagnets disposed in spaced apart orientation on an inner
9 perimeter of said frame member, each of said plurality of electromagnets having an
10 electrical circuit means powered by an electric power source connected thereto, said
11 electrical circuit means provides electric power from the electric power source in a timed
12 sequence to alternate the magnetic poles of each of said plurality of electromagnets
13 resulting in reciprocation of each gimbal supported ring magnet and repositioning of
14 each gimbal magnet field in relation to said axial shaft; and

15 at least one pair of rotor magnets disposed on said axial shaft, said at least one
16 pair of rotor magnets disposed in opposed orientation on said axial shaft, said at least
17 one pair of rotor magnets rotates in unison with said axial shaft, each rotor magnet
18 having a rotor magnet field defined by respective north and south poles oriented in a
19 circumferential path of rotation about said axial shaft with said rotor magnet field

20 directed substantially perpendicular to the axis of rotation of said axial shaft, said rotor
21 magnet field is alternately attracted to and repelled from each gimbal magnet field upon
22 repositioning of each gimbal supported ring magnet by the alternation of the magnetic
23 poles of each of said plurality of electromagnets.

1 16. (Previously presented) The apparatus of Claim 15 wherein said at least one
2 rotor magnet includes a plurality of pairs of rotor magnets positioned in spaced apart
3 configuration along said axial shaft, each pair of said plurality of pairs of rotor magnets
4 are separated by an angle of separation in a range between about 90 degrees of
5 separation to about 180 degrees of separation.

1 17. (Previously presented) A non-linear magnetic harmonic pump including a
2 housing having a plurality of fluid channels therein, the plurality of fluid channels
3 including at least one inlet fluid channel and at least one output fluid channel,
4 comprising:

5 a plurality of rotor magnet units disposed within the housing, each rotor magnet
6 unit including an axial shaft disposed within each one of a plurality of radially oriented
7 fluid channels connected between the plurality of fluid channels, each radially oriented
8 fluid channel is in fluid communication with the at least one inlet fluid channel and
9 with the at least one output fluid channel within the housing, each rotor magnet unit
10 further including:

11 a plurality of impeller fins interconnected at a base end of each impeller fin to
12 rotate around said axial shaft, each impeller fin having distal ends rotating around said
13 axial shaft for transfer of fluid through each respective radially oriented fluid channel;
14 and

15 at least one rotor magnet extended in a radial configuration interdisposed

16 between said plurality of impeller fins, said at least one rotor magnet rotatable around
17 said axial shaft in unison with said plurality of impeller fins, said at least one rotor
18 magnet including respective north and south poles oriented in a circumferential path of
19 rotation about said axial shaft with the net flux fields of the north and south poles
20 directed substantially perpendicular to the axis of rotation of said axial shaft; and

21 a plurality of gimbal lever magnets disposed to extend in a radial configuration

22 from a central gimbal supported pivot axis, each gimbal lever magnet disposed in
23 spaced-apart orientation between respective pairs of said plurality of rotor magnet
24 units, said plurality of gimbal lever magnets are each reciprocatingly moved in a non-
25 linear path relative to the central gimbal supported pivot axis, each gimbal lever magnet
26 having a gimbal magnet field disposed between a north and a south magnet pole of each
27 gimbal lever magnet;

28 whereby each rotor magnet unit rotates about each respective axial shaft upon

29 the influence on the net flux fields of the north and south poles of each respective rotor
30 magnet by the movement of the gimbal magnet field of each gimbal lever magnet
31 disposed between respective pairs of rotor magnet units, with pumping of fluids through
32 each respective fluid channel from the at least one inlet fluid channel and toward the at
33 least one output fluid channel of the pump.

1 18. (Previously presented) A non-linear magnetic harmonic pump including a

2 housing having a plurality of fluid channels therein, the plurality of fluid channels
3 including at least one inlet fluid channel and at least one output fluid channel,
4 comprising:

5 a plurality of stator magnets disposed in spaced-apart orientation along a

6 perimeter of a housing, each stator magnet having a north and a south magnet pole

7 having respective north and south magnetic fields;

8 a plurality of rotor magnet units disposed within the housing, each rotor magnet

9 unit including an axial shaft disposed within each one of a plurality of radially oriented

10 fluid channels connected between the plurality of fluid channels, each radially oriented

11 fluid channel is in fluid communication with the at least one inlet fluid channel and

12 with the at least one output fluid channel within the housing, each rotor magnet unit

13 further including:

14 a plurality of impeller fins interconnected at a base end of each impeller fin to

15 rotate around said axial shaft, each impeller fin having distal ends rotating around said

16 axial shaft for transfer of fluid through each respective radially oriented fluid channel;

17 at least one rotor magnet extended in a radial configuration interdisposed

18 between said plurality of impeller fins, said at least one rotor magnet rotatable around

19 said axial shaft in unison with said plurality of impeller fins, said at least one rotor

20 magnet including a rotor magnet field defined by respective north and south poles

21 oriented in a circumferential path of rotation about said axial shaft with the net flux

22 fields of the north and south poles directed substantially perpendicular to the axis of

23 rotation of said axial shaft;

24 a plurality of gimbal lever magnets disposed to extend in a radial configuration

25 from a central gimbal supported pivot axis, each gimbal lever magnet disposed in

26 spaced-apart orientation between respective pairs of said plurality of rotor magnet

27 units, said plurality of gimbal lever magnets are each reciprocatingly moved in a non-

28 linear path relative to the central gimbal supported pivot axis, each gimbal lever magnet

29 having a gimbal magnet field disposed between a north and a south magnet pole of each

30 gimbal lever magnet; and

31 a plurality of electromagnets disposed in spaced apart orientation within said

32 housing, each electromagnet is interdisposed between each rotor magnet unit, each

33 electromagnet connected to an electric power source and a control means providing
34 electric power in a timed sequence to each electromagnet to alternate the magnetic
35 poles of each electromagnet;

36 whereby each rotor magnet unit rotates about each respective axial shaft upon
37 the influence on the rotor magnet field of each respective rotor magnet by the attracting
38 and repelling of the magnet fields of each stator magnet disposed along the perimeter of
39 the housing, by the alternating of the magnetic poles of each electromagnet, and by the
40 movement of the gimbal magnet field of each gimbal lever magnet with resulting
41 pumping of fluids through each respective fluid channel from the at least one inlet fluid
42 channel and toward the at least one output fluid channel of the pump.

1 19. (Previously presented) A non-linear magnetic harmonic electric generator
2 including a housing having a plurality of channels therein, said electric generator
3 including electromagnetic induction elements interdisposed between the plurality of
4 channels and circuitry interconnected with the electromagnetic induction elements,
5 said electric generator comprising:

6 a central magnet supported in a gimbal configuration, said central magnet is
7 reciprocatingly moved in a non-linear path relative to the housing, said central magnet
8 having a central magnetic field defined by the north and south magnet poles oriented
9 on respective inner and outer perimeters of said central magnet to form a central
10 magnetic field; and

11 a plurality of rotor magnet units disposed within the housing, each rotor magnet
12 unit including an axial shaft disposed within each one of a plurality of radially oriented
13 channels of the plurality of channels, each radially oriented channel is adjacent at least
14 one of the electromagnetic induction elements, each rotor magnet unit further
15 including:

16 at least one rotor magnet rotatable around said axial shaft, each rotor
17 magnet including a rotor magnet field defined by respective north and south
18 poles oriented in a circumferential path of rotation about said axial shaft with the
19 net flux fields of the north and south poles directed substantially perpendicular
20 to the axis of rotation of said axial shaft;
21 whereby rotation occurs for each rotor magnet unit about each respective axial
22 shaft upon the influence on the rotor magnet field of each respective rotor magnet by
23 the movement of the central magnetic field of the central magnet along with the
24 alternation of the magnetic poles of each electromagnet, the rotation of each rotor
25 magnet unit induces rotation of each respective axial shaft for activation of circuitry for
26 the production of electricity.

1 20. (Previously presented) A non-linear magnetic harmonic electric generator
2 including a housing having a plurality of channels therein, said electric generator
3 including magnetic induction elements interdisposed between the plurality of channels
4 and circuitry interconnected with the magnetic induction elements, said electric
5 generator comprising:

6 a central magnet supported in a gimbal configuration, said central magnet is
7 reciprocatingly moved in a non-linear path relative to the housing, said central magnet
8 having a central magnetic field defined by the north and south magnet poles oriented
9 on respective inner and outer perimeters of said central magnet to form a central
10 magnetic field;

11 a plurality of stator magnets disposed in spaced-apart orientation along a
12 perimeter of a housing, each stator magnet having a north and a south magnet pole
13 having respective north and south magnetic fields; and

14 a plurality of rotor magnet units disposed within the housing, each rotor magnet

15 unit including an axial shaft disposed within each one of a plurality of radially oriented
16 channels of the plurality of channels, each radially oriented channel is adjacent at least
17 one of the magnetic induction elements, each rotor magnet unit further including:
18 at least one rotor magnet rotatable around said axial shaft, each rotor
19 magnet including a rotor magnet field defined by respective north and south
20 poles oriented in a circumferential path of rotation about said axial shaft with the
21 net flux fields of the north and south poles directed substantially perpendicular
22 to the axis of rotation of said axial shaft;
23 whereby rotation occurs for each rotor magnet unit about each respective axial
24 shaft upon the influence on the rotor magnet field of each respective rotor magnet by
25 the attracting and repelling of the magnet fields of each stator magnet and by the
26 movement of the central magnetic field, the rotation of each rotor magnet unit produces
27 rotation of each respective axial shaft for activation of circuitry attached to each
28 respective axial shaft for the production of electricity.